

SIGNIFICANT COLLECTIONS OF LOUISIANA PLANTS
XII. WASHINGTON AND ST. TAMMANY PARISHES

R. Dale Thomas and David D. Taylor, The Herbarium, Department of Biology, Northeast Louisiana University, Monroe, La. 71209-0502.

A preliminary survey of the vascular flora of Washington and St. Tammany Parishes, Louisiana was made between August, 1982 and April, 1984. Vouchers collected during the study, augmented by vouchers on deposit in several Louisiana herbaria and literature citations, indicate that a flora of 156 families, 615 genera, and 1682 specific and subspecific taxa exists. The taxa in Washington Parish totaled 134 families, 490 genera, and 1167 specific and subspecific taxa. The taxa in St. Tammany Parish totaled 148 families, 578 genera, and 1461 specific or subspecific taxa. Several distribution records for the state and one national record are noted. An annotated plant list noting distribution and abundance in the study area is included in a thesis (Taylor 1984). The various habitats and common and rare plants are also discussed.

Washington and St. Tammany Parishes, with land areas of 676 square miles and 873 square miles, respectively, are located in the southeastern tip of Louisiana. Washington Parish is bounded on the north, and on the east by Mississippi and on the south by St. Tammany Parish. St. Tammany Parish is bounded on the east by Mississippi and on the south by Lake Pontchartrain. Tangipahoa Parish adjoins both parishes on the west.

The climate of the area is warm, humid and subtropical due largely to its low latitude and proximity to the Gulf of Mexico. The average number of frost-free days per year is 248-265. The elevation ranges from about 370 feet above sea level in Washington Parish to sea level on the southern edge of St. Tammany Parish. The vegetation ranges from pine forested hills to brackish to saline marshes. Large areas of bottomland hardwoods forest occur along the Bogue Chitto and Pearl Rivers. The Pearl River State Wildlife Management Area and the Bogue Chitto National Wildlife Refuge are now preserving large areas of this valuable forest type. The vegetation of both parishes, but especially that of St. Tammany Parish, is rapidly being destroyed by the spread of metropolitan New Orleans into the area.

The variety of habitats and of plants present in these two parishes has long attracted plant collectors. Several plants occur in Louisiana only in these two parishes, and many others are restricted to the area of the state east of the Mississippi River (The Florida Parishes). Thomas has collected extensively in the study area since 1966, and large numbers of specimens collected by others are on deposit in the other Louisiana herbaria.

A complete list of the plants thus far known from the parishes is included in the thesis (Taylor 1984). Specimens not found in the Herbarium of Northeast Louisiana University (NLU) have the literature citation or the location of the specimen given. A complete list of the species is also found in Taylor and Thomas (1985). The rare plants from the study area are listed below by parish. Those with a letter P after them indicate that they are on the February, 1986 "Louisiana Special Plant List" (Parker 1986).

Rare plants found in both Washington and St. Tammany Parishes include: Alysicarpus vaginalis (L.) DC., Aptera aphylla (Nutt.) Barnh., Arundinaria gigantea (Walt.) Muhl. ssp. tecta (Walt.) McClure, Asclepias humistrata Walt. (P), Asclepias lanceolata Walt., Asclepias michauxii Dcne., Aster adnatus Nutt., Aster linifolius L., Aster solidaginensis Michx. (P), Aster tortifolius Michx., Bigelovia nudata (Michx.) DC., Bulbostylis barbata (Rottb.) Clark ex Hook., Bulbostylis capillaris (L.) Clarke ex Hook., Burmannia capitata (Walt.) Mart. (P), Calamintha georgiana (R. M. Harper) Shinnery (P), Calopogon tuberosus (L.) B.S.P., Carphephorus odoratissimus (J. F. Gmel.) Hebert, Carphephorus pseudoliatris Cass., Chamaelirium luteum (L.) DC. (P), Chrysopsis hyssopifolia Nutt. (P), Cleistes divaricata (L.) Ames (P), Clethra alnifolia L., Cnidioscolus stimulosus (Michx.) Gray, Collinsonia canadensis L., Coreopsis major Walt. forma oemleri (Ell.) Sherff., Coreopsis nudata Nutt. (P), Crotalaria purshii DC. (P), Crotalaria rotundifolia Walt. ex J. F. Gmel., Drymaria cordata (L.) Willd., Elephantopus elatus Bertol. (P), Epidendrum conopseum R. Br., Gaylussacia dumosa (Andr.) Torr. & Gray, Gaylussacia mosieri (Small) Chapm., Gelsemium rankii Small, Gentiana saponaria L., Gentiana villosa L., Helianthus floridanus Gray, Helianthus heterophyllus Nutt., Helianthus microcephala Torr. & Gray, Helianthus radula (Pursh) Torr. & Gray, Hexastylis arifolia (Michx.) Small, Ilex amelanchier M. A. Curtis (P), Lachnanthes caroliniana (Lam.) Dandy (P), Lachnocaulon anceps (Walt.) Morong, Leucothoe axillaris (Lam.) D. Don, Leucothoe racemosa (L.) Gray, Liatris tenuis Shinnery (P), Lilium catesbaei Walt. (P), Lilium michauxii Poir., Listera australis Lindl., Lobelia brevifolia Nutt., Lobelia floridana Chapm., Lupinus villosus Willd. (P), Lyonia lucida Lam., Macranthera flammea (L.) Penn. (P), Magnolia macrophylla Michx., Mayaca aubletii Michx. (P), Melanthium virginicum L., Mitrocarpus hirtellus (L.) DC., Osmanthus americanus (L.) Gray, Plantanthera nivea (Nutt.) Luer, Podostemum ceratophyllum Michx. (P), Polygala grandiflora Walt., Rhexia nashii Small (P), Rhynchospora chapmanii M. A. Curtis (P), Rhynchospora debilis Gale (P), Sabatia macrophylla Hook. (P), Seymeria cassiodes (J. F. Gmel.) Blake, Stenanthium gramineum (Ker.) Morong, Stokesia laevis (Hill) Greene (P), Tephrosia florida (F. G. Dietr.) C. E. Wood., Tephrosia spicata (Walt.) Torr. & Gray, Tofieldia racemosa (Walt.) B.S.P. (P), Trichomenes petersii Gray (P), Tridens chapmanii (Small) Chase (P), Vaccinium

darrowii Camp, Viburnum cassinoides L., and Wahlenbergia marginata (Thunb.) DC.

Rare plants found in Washington Parish but not in St. Tammany Parish include: Aristolochia tomentosa Sims, Botrychium alabamense Maxon (P), Botrychium lunarioides Michx., Buchnera americana L., Carya pallida (Ashe) Engelm. & Graebn. (P), Coreopsis major Walt. (P), Crotalaria intermedia Kotschy, Cyperus cuspidatus H.B.K. (P), Desmodium tortuosum (Sw.) DC., Drosera intermedia Hayne in Schrad. (P), Dulichium arundinaceum (L.) Britt., Echinacea purpurea (L.) Moench., Fuirena bushii Kral, Gaura filipes Spach, Geobalanus oblongifolius (Michx.) Small (P), Hypoxis longii Fern. (P), Isoetes louisianensis Thieret (I. engelmännii x I. melanopoda) (P), Kalmia latifolia L. (P), Lindera subcoriacea B. E. Wofford (P), Magnolia pyramidata Bart. ex Pursh. (P), Myrica inodora Bart. (P), Polansia dodecandra (L.) DC., Potamogeton epihydrus Raf. (P), Prenanthes altissima L. var. cinnamomea Fern., Psilocarya nitens (Vahl) Wood (P), Quercus laevis Walt. (P), Rudbeckia laciniata L. (P), Sanicula marilandica L. (P), Smilax herbacea L., Solidago gigantea Muhl., Thelypteris noveboracensis (L.) Nieuwl. (P), Tragia cordata Michx., and Utricularia juncea Vahl (P).

Rare plants found in St. Tammany Parish but not in Washington Parish include: Acacia smallii Isely, Acanthospermum australe (L.) Kuntze, Agalinis aphylla (Nutt.) Raf. (P), Agalinis filicaulis (Benth.) Penn. (P), Agalinis linifolia (Nutt.) Britt. (P), Amorpha croceolanata Wats., Amorpha nitens L. (P), Andropogon mohrii (Hackel) Hackel ex Vasey (P), Arenaria lanuginosa (Michx.) Rohrb., Arthraxon hispidus (Thunb.) Makino, Asclepias longifolia Michx., Asclepias rubra L., Bartonia verna (Michx.) Muhl. (P), Bulbostylis ciliatifolia (Ell.) Fern., Calopogon pallidus Chapm. (P), Ceratophyllum muricatum Cham., Chasmanthium ornithorynchum (Steud.) Yates (P), Cirsium lecontei Torr. & Gray (P), Coelorachis rugosa (Nutt.) Nash, Coelorachis tessellata (Steud.) Nash (P), Cynanchum angustifolium Pers., Cypselea humifusa Turpin, Dyssodia tenuiloba (DC.) Robins., Eleocharis elongata Chapm. (P), Eriocaulon compressum Lam., Erigeron myrionactis Small, Eryngium yuccifolium Michx. var. synchaetum Gray ex Coult., Eulophia ecristata (Fern.) Ames (P), Euthamia graminifolia (L.) Nutt., Euthamia minor (Michx.) Greene, Fuirena scirpoidea Michx. (P), Fuirena simplex Vahl (P), Gutierrezia dracunculoides (DC.) Blake, Hackelochloa granularis (L.) Kuntze, Helenium brevifolium (Nutt.) Wood. (P), Helenium drummondii H. Rock, Holcus lanatus L., Hydrocotyle sibrothopoides Lam., Hyptis mutabilis (A. Rich.) Briq., Ilex cassine L. var. cassine (P), Ilex cassine L. var. myrtifolia (Walt.) Sarg. (P), Justicia americana (L.) Vahl (P), Kickxia elatine (L.) Dumort., Lilaeopsis caroliniensis Coult. & Rose, Limonium nashii Small, Lobelia inflata L. (P), Lobelia siphilitica Lam., Lophiola americana Pursh (P), Lycopodium cernuum

L. (P), Murdannia nudiflora (L.) Brenan, Odontonychia corymbosa Small (P), Oenothera humifusa Nutt. (P), Panicum tenerum Beyr. (P), Parkinsonia aculeata L., Pentodon pentandrus (Schum. & Thonn.) Vatke, Pinguicula lutea Walt. (P), Platanthera blephariglottis (Willd.) Lindl. (P), Polygala nuttallii Torr. & Gray (P), Polystichum tsus-simense (Hook.) J. Sm., Pteris multifida Poir., Pteris vittata L., Quercus minima (Sarg.) Small (P), Rhynchospora ciliaris (Michx.) Mohr (P), Rhynchospora miliacea (Lam.) Gray (P), Ruellia noctiflora (Nees) Gray (P), Rumex chrysocarpus Moris, Rumex mexicanus Meisn., Rumex paraguayensis D. Parodi, Sabatia arenicola Greenm. (P), Sarracenia psittacina Michx. (P), Selaginella ludoviciana A. Braun (P), Serenoa repens (Bartr.) Small (P), Sium suave Gmel. (P), Smilax auriculata Walt., Solidago fistulosa Mill., Taxodium adscendens Brongn., Tephrosia hispidula (Michx.) Pers., Uniola paniculata L. (P), Utricularia purpurea Walt. (P), Vallisneria americana Michx., and Zizania aquatica L.

Citations for the state records collected during this study are as follows:

Catapodium rigidum (L.) C. E. Hubbard ex Dong.

ST. TAMMANY PARISH: Sandy roadbank of La. 433 in marsh at curve at Rigolets Estates one mile NW of U.S. 90, Sec. 11, T10S, R14E. R. Dale Thomas, David D. Taylor, and John W. McCoy 83612 & 3239, 17 May 1983. This specimen was determined by Charles M. Allen.

Liatris graminifolia Willd.

WASHINGTON PARISH: Infrequent in hardwood forest on bluffs about two miles west of Enon in Sec. 53, T3S, R11E. Charles M. Allen 8866, 4 November 1978. This specimen was verified by K. N. Gandhi.

Pterocarya stenoptera DC.

WASHINGTON PARISH: Large spreading-crowned tree near La. 21 (Main Street) at Railroad Street in Angie, Sec. 17, T1S, R14E. Large tree about 40 ft. tall. Cultivated but spreading other side of Railroad street. Many small plants one to four inches dbh in waste area at least 400 feet from main tree. R. Dale Thomas 84236, 14 June 1983. Duplicates were determined by Donald Stone and by Bill Hess. This is the first record of this species becoming established and spreading in the United States.

Rhynchospora pleiantha (Kukenth.) Gale

ST. TAMMANY PARISH: Open fields in swampy area south of U.S. 190 just east of La. 25 north of Covington, Sec. 43, T6S, R11E. R. Dale Thomas and Barbara G. Thomas 49299, 49302, 2 June 1976. Both collections were determined by James W. Kessler in 1981.

Rhynchospora stenophylla Carey ex Chapm.

WASHINGTON: Swampy area beside La. 10 east of Lawrence Creek three miles east of Franklinton, Sec. 29, T2S, R11E. R. Dale Thomas and Ken E. Rogers 29350, 13 May 1972. This is the same location as Thomas 29374 and as Rogers 8072 from the University of Tennessee. These specimens were determined by James Kessler in 1985. One at LAF was determined by John Owen Joyce in 1973 and the Rogers collection was determined by Ken E. Rogers in 1972. Neither of these species of Rhynchospora included in Thomas and Allen (1984). This species was collected in a habit containing several rare plants from Louisiana including Myrica inodora Bartr., Mayaca aubletti Michx., and Lindera subcoriacea B. E. Wofford.

Rumex conglomeratus Murray

ST. TAMMANY PARISH: Four locations: Along roadbank of U.S. 90 at Pearl River and Mississippi State Line, Sec. 29, T9S, R16E, R. Dale Thomas 84252, 15 June 1983; Roadbank and marsh beside La. 22 along east bank of Tchefuncte River at Madisonville, Sec. 25, T7S, R10E, R. Dale Thomas and Pat Pias 65176, 1 June 1979; Parking lot at Lake Ponchartrain west of Tchefuncte River at end of La. 1077 south of Madisonville, Sec. 2, T8S, R10E, R. Dale Thomas, David D. Taylor, and John McCoy, 83561 and 3188 and 83564 and 3190, 17 May 1983. All these specimens were determined by David D. Taylor. This species was not included in Thomas and Allen (1982).

Stipulicida setacea Michx.

ST. TAMMANY PARISH: Sandy area along east bank of West Middle Pearl River at second bridge on U.S. 90 east of U.S. 190 east of Slidell, Sec. 25, T9S, R15E. R. Dale Thomas, David D. Taylor, and John McCoy 83658 & 3285, 17 May 1983. The first collection was made at this site on 27 May 1982 (Thomas 81314). A large population of Odontonychia cormybose Small is intermingled with the Stipulicida, and Hyptis mutabilis (L. C. Rich.) Briq. and Lantana montevidensis (Spreng.) Briq. are abundant at a nearby bridge. The Stipulicida specimen was verified by John Thieret.

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